**Pin Diagram of STEM32F103**

**图表, 日程表

描述已自动生成**

**1 ESP8266 Wi-Fi Module**

Our group will use ESP8266 to connect STM32F103C8 to the internet. We will interface ESP8266 Wi-Fi module with our STM32F103C8 board and send the data to a webpage hosted on ESP8266 webserver. Since STEM32F support varieties of programming IDE(including Arduino IDE which we learned in ECE101), we will use arduino IDE to do the programming work and upload the code to STM32 board.

**1.1 Diagram of ESP8266:**

图示

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Figure 1.1 Diagram of ESP8266 and the pins

**1.2 Description of ESP8266**

|  |  |  |
| --- | --- | --- |
| Pin Number | Pin Name | Verification |
| 1 | GND | Ground (0 V) |
| 2 | TXD | Transmit data bit X |
| 3 | GPIO 2 | General-purpose input/output No. 2 |
| 4 | CH\_PD | Chip power-down |
| 5 | GPIO0 | General-purpose input/output No. 0 |
| 6 | RST | Reset |
| 7 | RX | Receive data bit X |
| 8 | VCC | Voltage (+3.3 V) |

Table 1.2 Pin Number, Pin Name and Verification of ESP8266 Module

**1.3 Circuit Diagram and Connections**

**图片包含 图示

描述已自动生成**

Figure 3.3 Circuit diagram and connections between ESP8266 and STM32F103C8

**1.4 Connection between two chips**

|  |  |
| --- | --- |
| **ESP8266** | **STM32** |
| VCC | 3.3V |
| GND | G |
| CH\_PD | 3.3V |
| TX | PA3 |
| RX | PA2 |

Table 1.4 Pins Connection between ESP8266 and STM32F103C8

**1.5 Ports and Tolerant**

|  |  |  |
| --- | --- | --- |
| **Serial Port** | **Pins** | **Tolerant** |
| Serial1 (TX1,RX1) | PA9,PA10 PB6,PB7 | 5V |
| Serial2 (TX2,RX2) | PA2,PA3 | 3.3V |
| Serial3 (TX3,RX3) | PB10,PB11 | 5V |

Table 1.4 Ports and Tolerant of STM32F103C8